FIG. 1

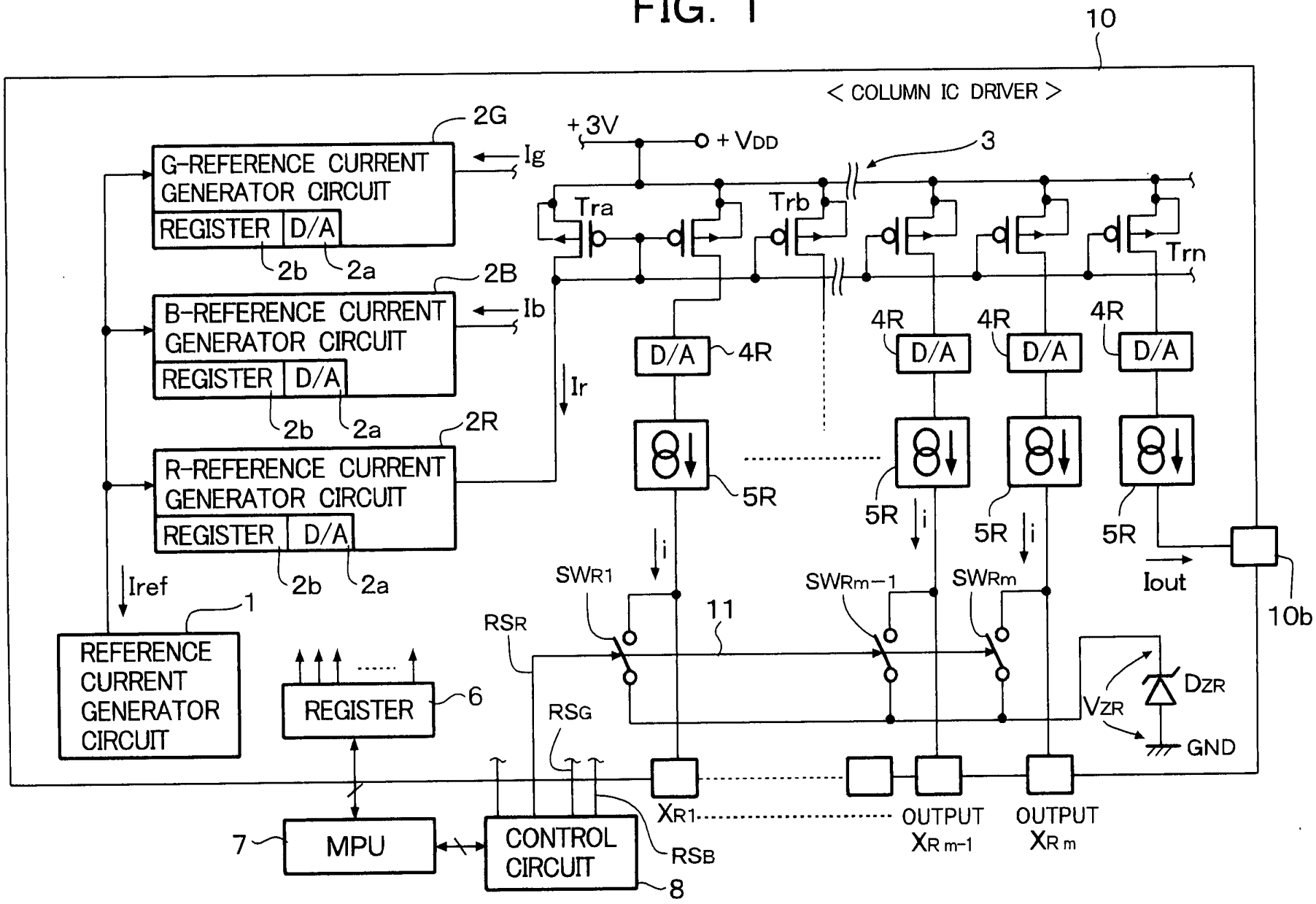

10
< COLUMN IC DRIVER >
2G
G-REFERENCE CURRENT GENERATOR CIRCUIT
REGISTER
D/A
2b
2a
Ig
+3V
+VDD
3
Tra
Trb
Trn
2B
B-REFERENCE CURRENT GENERATOR CIRCUIT
Ib
Ir
4R
2R
R-REFERENCE CURRENT GENERATOR CIRCUIT
5R
i
Iref
1
REFERENCE CURRENT GENERATOR CIRCUIT
SWR1
SWRm−1
SWRm
RSR
11
Iout
10b
REGISTER
6
RSG
DZR
VZR
GND
XR1
OUTPUT XR m-1
OUTPUT XR m
7
MPU
CONTROL CIRCUIT
RSB
8

FIG. 2

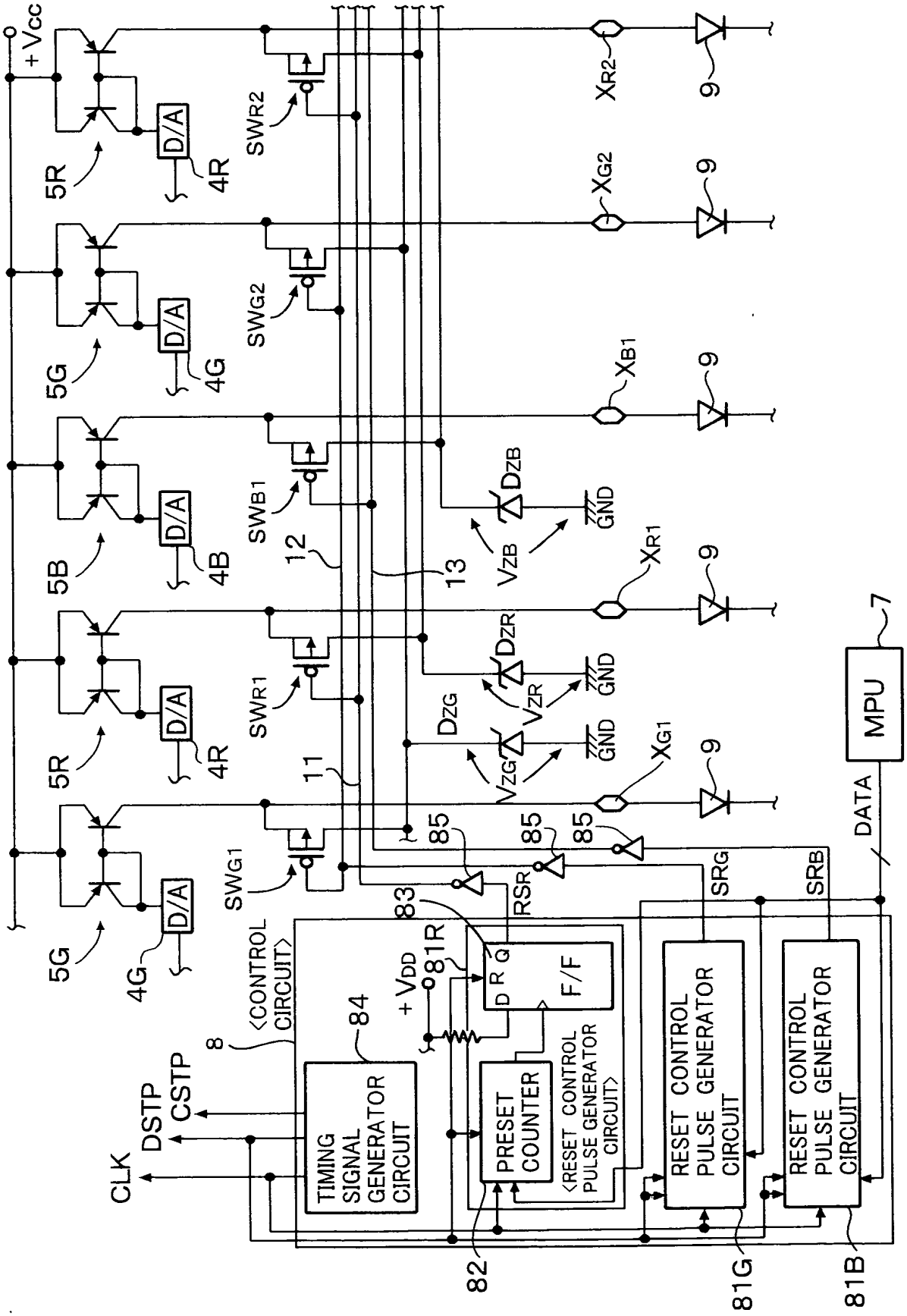
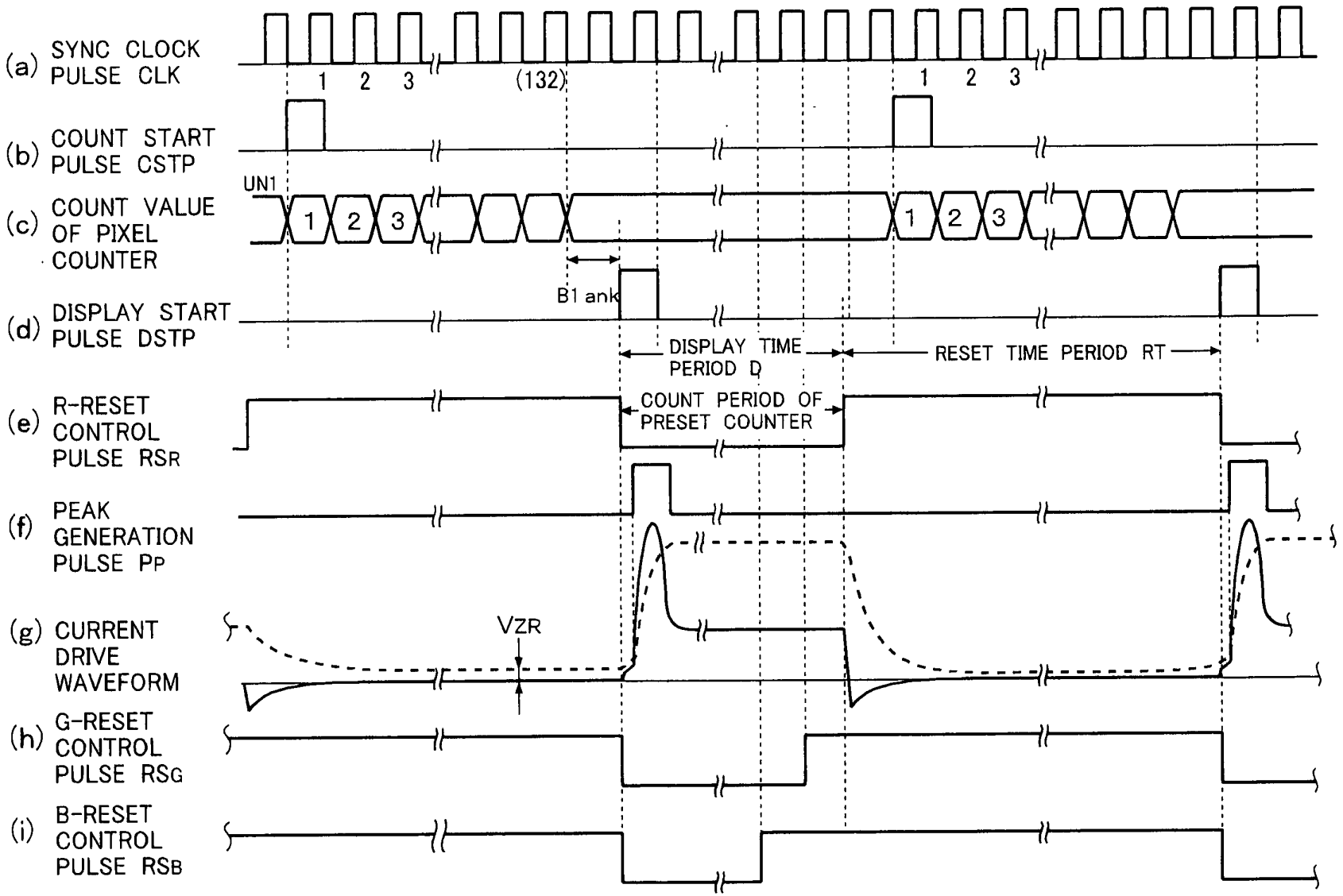

+Vcc
5R
5G
5B
4R
4G
4B
D/A
SWR1
SWG1
SWB1
SWR2
SWG2
XR1
XG1
XB1
XR2
XG2
9
12
13
11
DZR
DZG
DZB
VZR
VZG
VZB
GND
85
RSR
SRG
SRB
83
81R
+VDD
D R Q
F/F
84
8
<CONTROL CIRCUIT>
TIMING SIGNAL GENERATOR CIRCUIT
PRESET COUNTER
<RESET CONTROL PULSE GENERATOR CIRCUIT>
RESET CONTROL PULSE GENERATOR CIRCUIT
82
81G
81B
CLK
DSTP
CSTP
DATA
MPU
7

FIG. 3


(a) SYNC CLOCK PULSE CLK
1 2 3
(132)
1 2 3
(b) COUNT START PULSE CSTP
UN1
(c) COUNT VALUE OF PIXEL COUNTER
1 2 3
1 2 3
B1 ank
(d) DISPLAY START PULSE DSTP
DISPLAY TIME PERIOD D
RESET TIME PERIOD RT
COUNT PERIOD OF PRESET COUNTER
(e) R-RESET CONTROL PULSE RSR
(f) PEAK GENERATION PULSE PP
VZR
(g) CURRENT DRIVE WAVEFORM
(h) G-RESET CONTROL PULSE RSG
(i) B-RESET CONTROL PULSE RSB